



MEDIA RELEASE

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New study aims to deepen our understanding of a critical factor for the successful introduction of automated vehicles: High Definition maps

A new collaboration through iMOVE Cooperative Research Centre involving Queensland's Department of Transport and Main Roads (TMR), the Royal Automobile Club of Queensland (RACQ) and Queensland University of Technology (QUT) will increase our understanding of a critical element for the successful introduction of automated vehicles (AVs).

To operate safely, most AVs require purpose-built maps (also known as High Definition (HD) maps), which contain significantly more detailed information than those found in current conventional maps like Google Maps. These HD maps will play a key role for highly autonomous vehicles, but also may enhance the capabilities of vehicles with more limited autonomy, including those already in use on our roads.

This new study will review what is happening globally with HD maps, and what models are being considered by governments and industry internationally regarding their role in creating and maintaining these maps.

The study will build on the findings of a previous project run through iMOVE CRC: *How Automated Vehicles Will Interact with Road Infrastructure Now and in the Future*. This previous project identified the availability and use of HD maps as a critical enabler of radically improved performance of AVs.

Says Ian Christensen, Managing Director at iMOVE, 'Getting the fundamentals right is crucial if we want to reap the benefits and minimise issues from the introduction of AVs on our roads. This project is an important stepping stone in an area already identified through evidence-based research as a very high priority for a safe, successful AV future.'

As a road infrastructure manager, the Queensland Government has a vital role to play in creating, monitoring and maintaining detailed maps of the road environment. Through this project, TMR aims to better understand the potential requirements for geospatial data to support the operation of autonomous vehicles now and in the future.

Transport and Main Roads Minister Mark Bailey said new technologies like automated vehicles and integrated transport services have the opportunity to make Queensland's 33,000km network of state roads faster, safer and more convenient, while also supporting jobs in new and emerging industries.

"Global economies have been impacted by COVID-19, and Queensland hasn't been immune, but the state's strong health response so far means we can continue to deliver a plan to Unite and Recover for Queensland Jobs," Mr Bailey said.

"That includes nurturing advanced technologies and creating jobs in this space.



“This study will help us understand and expedite introduction of automated vehicle technologies on our roads.”

For QUT, this study represents an opportunity to further deepen the collaborative relationships with partners in the pursuit of safer, better transport.

‘We’re excited to be investigating how high definition maps can be created, monitored and maintained to facilitate all types of autonomous driving, and models of how government and industry can be involved,’ says Professor Michael Milford, Deputy Director at the QUT Centre for Robotics.

Project partner RACQ sees its participation in the study as another way in which it can collaborate to create safer and more efficient roads as vehicles become more highly automated.

Dr Rebecca Michael, RACQ’s Head of Public Policy says, ‘Queensland has the longest state-controlled road network in Australia. Reliable mapping of the network will be essential to the successful deployment of AVs. Improved mobility options and road safety outcomes are driving the introduction of autonomous technology and this project is a critical first step to understanding the potential for high definition maps to support the introduction of AVs in Queensland’.

More information is available about this and other iMOVE transport projects on the iMOVE website: www.imoveaustralia.com.

ABOUT iMOVE

iMOVE is the national centre for collaborative R&D in transport and mobility. It facilitates, supports and co-funds research projects that improve the way people and goods move in Australia. It has 44 industry, government and academic partners and has over 50 projects completed or currently underway in a broad range of transport areas.

Find out more about our work: imoveaustralia.com

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